IV. The Treatment of Large Defects of the Mucous Membrane of the Cheek. By PROF. M. OBERST (Halle). Loss of substance of the mucous membrane of the cheeks from whatever cause, is always accompanied by the danger that the subsequent cicatricial contraction will prevent free motion of the lower jaw, and opening the mouth. Where large pieces of the mucous membrane have been removed, the subsequent contraction has been so great that absolute immobility of the jaw followed, and the teeth were dislocated by the continuous pressure.

If a strong cicatricial contraction follows the extirpation of a carcinoma of the mucous membrane of the cheek, the patients are in a worse condition than previously.

If an operation for the removal of carcinoma of the cheek has to be done, care must be taken to avoid the subsequent cicatricial contraction by some form of plastic operation.

In two cases Oberst did a plastic at the same time that he removed the carcinoma, using a part of the mucous membrane of the upper and lower lips to cover in the defects, and only leaving a very small portion of the wound to granulate.

Both patients did extremely well.

Oberst advises the employment of this method where little or no skin has been removed, if much of the latter has had to be sacrificed, he advises the transplantation of skin flaps with the epidermal layer turned inward, according to the various meloplastic operations devised by Gussenbauer, J. Israel, Hahn and others.

The mucous membrane of the cheek and lips is exceedingly well adapted for plastic purposes, as it is extremely elastic and vascular.

If this should not succeed, grafts taken from animal or human mucous membrane may be tried.—*Deutsch Med. Woch.* No. 5, 1890.

F. C. HUSSON (New York).

ABDOMEN.

I. A Contribution to the Surgery of the Liver. By Dr. JAMES ISRAEL (Berlin). A patient, æt. 34 years, suffered at the age of 5, from a freely movable abdominal tumor about the size of two fists.

At the age of 7, after an attack of fever this tumor opened in the rectum; and at present the scar is yet to be felt, just above and to right of the prostate. Most probably this tumor was an ecchinococcus cyst of the mesentery. After passing for a long time numerous vesicles per anum, the patient remained healthy till 1887 when icterus, swelling of the liver and a feeling of abdominal pressure set in. In December, 1888 there was marked enlargement of the liver and pronounced icterus. The liver was enlarged in the direction toward the free border of the ribs in the mamillary line by 11 cm and the ensiform cartilage by as much. The organ was scarcely enlarged upwards. The right lobe felt hard, irregular, hobnailed, and its free border presented many indentations, in short, it felt markedly cirrhotic.

A long needle introduced immediately under the free border of the right ribs and diverted upward and backward allowed echinococcus fluid to escape. Therefore the cyst must have been situated on the convexity of the liver, and shut in by the diaphragm. It could be operated on by one of two methods, either by the author's method of resecting a rib and cutting through the costal pleura and diaphragm, thus coming upon the sac, or by Landau's proceeding, that is dividing the abdominal wall and drawing down the liver in strong anteversion, so that the lower border of the sac comes into view. This latter method was chosen as the more rapid.

After opening the abdomen by a transverse incision immediately under the border of the right ribs, the liver could not be drawn downward and anteverted, for the organ was firmly adherent to the abdominal wall by band like adhesions, some of which were very short and strong, and they could not be divided without seriously damaging the hepatic structure. The part of the liver exposed by the incision was found to be the seat of an extremely marked cirrhosis over the anterior surface of the organ, exactly in the middle of the abdominal incision, there ran, from above downward an enormously dilated vein, about the size of the femoral artery. It being found impossible to draw down and tilt the liver, it was attempted to sew the non-adherent part to the wound, but this was found to be impossible owing to the extreme brittleness of the tissue. The wound had to be tamponed with iodoform

gauze. Seven days later, after adhesion had been formed, it was decided to cut through the thick hepatic stratum intervening between the cyst and the incision by means of the thermo cautery. This stratum was 7 cm. thick at its thinest point. The division of the tissues was guided by a needle introduced into the cyst. The operation went on without difficulty for the distance of about 1 cm., when suddenly a profuse hæmorrhage set in from the above described vein. This hæmorrhage was so severe as to necessitate compression of several minutes' duration. Just as the bleeding had been checked, and the tampons removed, an exceedingly alarming accident occurred. Suddenly intense dyspnœa set in, respirations reached 60 per minute. and all respiratory muscles worked to their utmost, deep cyanosis spread all over the body, the chest wall was shaken by an extremely strong heart's action, but in marked contra-distinction to this, the radial pulse was small; almost imperceptible. The sound over the aortic valves was weaker and weaker, while there was a marked sharp second pulmonary tone the respirations soon became irregular and sighing. The patient was almost moribund. Continual artificial respiration was kept up and about 50 dry cups were applied to the chest as rapidly as possible; numerous camphor-ether injections were made. In the course of an hour the respirations sank from 60 to 28 and the cyanosis almost completely disappeared. Auscultation of the lungs revealed on both sides sharp vesicular breathing and here and there a few crepitant râles. No bad symptoms followed this accident, which was probably due to entrance of air in the wounded vein, and air embolism in the course of the pulmonary artery.

Seven days later the operation was again undertaken, the tissue divided by a Pacquelin cautery and the sac reached. Soon as its contents were evacuated, a large quantity of bile escaped. That the bile did not come from the divided parenchyma was shown by its continuing to escape after the wound had been tamponed by hard rubber chemise canula. The only explanation for the flow of bile is that ulcerated bile ducts communicated directly with the echinococcus sac, and had remained closed owing to the pressure of the contents upon these ducts and that once the pressure removed, the canals could directly empty themselves in the sac.

As a rule the flow of bile soon ceases, but in this case it kept up continuously for over 16 months, and about 1 litre a day escaped; nevertheless the patient gained 5 to 6 pounds in weight. For the first six months after the operation hardly any of the bile escaped into the intestines. The cause, in this case, was an extensive calcareous degeneration of the cyst wall, which prevented its complete contraction and closure and hence the subsequent contraction of the gall ducts, and also the extremely cirrhotic condition of the liver prevented the bile from following unobstructedly in its normal direction. Attempts were made to dissolve these calcareous plates by injections of strong lactic acid, and even fuming nitric acid, but this was without avail; the best means was breaking them down piece-meal and removing them with dressing forceps. The cavity contracted somewhat after this but bile still escaped.

This fistula was afterwards closed by a well fitting drainage tube provided with a stop-cock, and from the moment this was done the external flow was completely controlled, and no dilatation of the cyst took place.

Later on it was attempted to close the fistula by making it heal by granulation, this was only partially accomplished. Frequent injections of tincture iodine were used for this purpose.

For the last ten weeks the tube has been removed completely and no bile escapes from the fistula.—*Deutsche. Med. Woch.*, No. 3, 1890.

F. C. Hudson (New York).

GENITO-URINARY ORGANS.

I. **Nephro-Lithotomy.** By Dr. E. L. Keyes (New York). The author reports six cases in which the kidney was exposed and explored by the lumbar incision for supposed stone. In one case an abscess without stone was discovered; in another case no stone or other lesion was found after very thorough exploration. All recovered promptly from the operation. His conclusions, based on his experience, are:

1. The posterior exploratory incision upon a kidney suspected to contain stone is devoid of any serious danger when performed with